

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for providing mobility ~~within a network~~ comprising the steps of:

transferring an anchor point from a first entity of a wireless network to a second entity of the wireless network during an active session between an access terminal and a peer entity in the wireless network, wherein the access terminal communicates with the peer entity through the anchor point during the active session, and wherein the anchor point is at the first entity before the step of transferring, comprising

setting up ~~another~~ the anchor point at the second entity;

transmitting ~~an~~ a first OSPF link state advertisement stating that packets with a first destination address of the anchor point can be sent to the second entity at a first nominally low cost, the first nominally low cost being lower than current nominally high cost of routing the packets with the first destination address to the first entity; advertisement at predetermined intervals; and

transmitting a second OSPF link state advertisement stating that packets with the first destination address of the anchor point and packets with a second destination address of the anchor point should no longer be routed to the first entity;

transmitting a third OSPF link state advertisement stating that the packets with the second destination address can be sent to the second entity at a second nominally low cost, the second nominally low cost being lower than a nominally high cost of routing the packets with the second destination address to the first entity; and

transmitting a fourth OSPF link state advertisement stating that the packets with the first and second destination addresses can be sent to the second entity at a nominally high cost, wherein the step of transmitting the fourth OSPF link state advertisement is performed after propagation of routes for delivering the packets with the first and second destination addresses at the first and second nominally low costs.

~~deleting said anchor point each time a session between an access terminal and the network ends.~~

2. (Currently Amended) The method of Claim 1, wherein said step of setting up comprises:

sending a first message from the first entity to the second entity, the first message comprising network interface information and a request to perform a first phase of anchor point transfer.

~~link advertisement contains:~~

~~a low cost associated with the routing of packets having an IP address of said remote system; and~~

~~an age field that is set to a value lower than a maximum age.~~

3. (Currently Amended) ~~A remote terminal~~ An apparatus for providing mobility within a network comprising:

at least one a component adapted to transfer an anchor point from a first entity of a wireless network to a second entity of the wireless network during an active session between an access terminal and a peer entity in the wireless network, wherein the access terminal communicates with the peer entity through the anchor point during the active session, and wherein the anchor point is at the first entity before the anchor point is transferred, the at least one component being configured to perform steps comprising:

that sets set up another the anchor point at the second entity;

transmitting a first link state advertisement stating that packets with a first destination address of the anchor point can be sent to the second entity at a first nominally low cost, the first nominally low cost being lower than current nominally high cost of routing the packets with the first destination address to the first entity;

transmitting a second link state advertisement stating that packets with the first destination address of the anchor point and packets with a second destination address of the anchor point should no longer be routed to the first entity;

transmitting a third link state advertisement stating that the packets with the second destination address can be sent to the second entity at a second nominally low cost, the second nominally low cost being lower than a nominally high cost of routing the packets with the second destination address to the first entity; and

transmitting a fourth link state advertisement stating that the packets with the first and second destination addresses can be sent to the second entity at a nominally high cost, wherein the step of transmitting the fourth link state advertisement is performed after propagation of routes for delivering the packets with the first and second destination addresses at the first and second nominally low costs.

~~delete said anchor point each time a session between an access terminal and the network ends, and transmits advertisements at predetermined intervals;~~

~~wherein said advertisements indicate that packets having a destination IP address equal to that of the IP address of said remote terminal should be delivered to said remote terminal; and~~

~~wherein the age field values of said advertisements are lower than a maximum age.~~

4. (Original) The apparatus of Claim 3, further comprising a user interface that allows the intervals at which said link advertisements are transmitted to be changed.

5. (Currently Amended) The ~~method~~ apparatus of claim 4, wherein said advertisements are OSPF link state advertisements.

6. (Currently Amended) The method according to claim 1, wherein said step of transferring an anchor point further comprises:

~~deactivating~~ deallocating resources associated with said anchor point at the first entity;
and

initializing said another the anchor point at the second entity.

7. (Previously Presented) The method according to claim 1, wherein said step of transferring an anchor point further comprises:

changing intervals at which said link advertisements are transmitted.

8. (Currently Amended) The method according to claim 1, wherein said step of transferring an anchor point further comprises:

setting a first timer representing the maximum amount of time it should take for a low cost route to propagate throughout the wireless network; and

sending an ARP message informing entities that all packets with a the second destination address ~~of said anchor point~~ may be sent to the second entity, ~~an address of said another anchor point~~.

9. (Currently Amended) The method according to claim 1, wherein said step of transferring an anchor point further comprises:

~~deactivating~~ deallocating resources associated with said anchor point at the first entity;

initializing ~~said another~~ the anchor point at the second entity;

changing intervals at which said link state advertisements are transmitted;

setting a first timer representing the maximum amount of time it should take for a low cost route to propagate throughout the wireless network; and

sending an ARP message informing entities of the subnet of the second entity that all packets with a the second destination address ~~of said anchor point~~ may be sent to the second entity, ~~an address of said another anchor point~~.

10. (Currently Amended) The ~~remote terminal~~ apparatus according to claim 3, wherein said at least one component is further adapted to:

~~deactivate~~ deallocate resources associated with said anchor point at the first entity; and

initialize ~~said another~~ the anchor point at the second entity.

11. (Currently Amended) The ~~remote terminal~~ apparatus according to claim 3, wherein said at least one component is further adapted to:

change intervals at which said link advertisements are transmitted.

12. (Currently Amended) The ~~remote-terminal~~ apparatus according to claim 3, wherein said at least one component is further adapted to:

set a first timer representing the maximum amount of time it should take for a low cost route to propagate throughout the wireless network; and

send an ARP message informing entities that all packets with a the second destination address ~~of said anchor point~~ may be sent to the second entity, ~~an address of said another anchor point~~.

13. (Currently Amended) The ~~remote-terminal~~ apparatus according to claim 3, wherein said at least one component is further adapted to:

~~deactivate~~ deallocate resources associated with said anchor point at the first entity;

initialize ~~said another~~ the anchor point at the second entity;

change intervals at which said link advertisements are transmitted;

set a first timer representing the maximum amount of time it should take for a low cost route to propagate throughout the wireless network; and

send an ARP message informing entities of the subnet of the second entity that all packets with a the second destination address ~~of said anchor point~~ may be sent to the second entity, ~~an address of said another anchor point~~.

14. (Currently Amended) A means for providing mobility within a network comprising:

means for transferring an anchor point from a first entity of a wireless network to a second entity of the wireless network during an active session between an access terminal and a peer entity in the wireless network, wherein the access terminal communicates with the peer entity through the anchor point during the active session,
comprising

means for setting up ~~another~~ the anchor point at the second entity;

means for transmitting ~~as~~ a first OSPF link state advertisement stating that packets with a first destination address of the anchor point can be sent to the second entity at a first nominally low cost, the first nominally low cost being

lower than current nominally high cost of routing the packets with the first destination address to the first entity; at predetermined intervals; and

means for transmitting a second OSPF link state advertisement stating that packets with the first destination address of the anchor point and packets with a second destination address of the anchor point should no longer be routed to the first entity;

means for transmitting a third OSPF link state advertisement stating that the packets with the second destination address can be sent to the second entity at a second nominally low cost, the second nominally low cost being lower than a nominally high cost of routing the packets with the second destination address to the first entity;

means for transmitting a fourth OSPF link state advertisement stating that the packets with the first and second destination addresses can be sent to the second entity at a nominally high cost, wherein the step of transmitting the fourth OSPF link state advertisement is performed after propagation of routes for delivering the packets with the first and second destination addresses at the first and second nominally low costs.

~~means for deleting said anchor point each time a session between an access terminal and the network ends.~~

15. (Currently Amended) The means for providing mobility within a network according to claim 14, wherein said means for transferring an anchor point further comprises:

means for ~~deactivating~~ deallocating resources associated with said anchor point at the first entity; and

means for initializing ~~said another~~ the anchor point at the second entity.

16. (Currently Amended) The means for providing mobility within a network according to claim 14, wherein said means for transferring an anchor point further comprises:

means for changing intervals at which at least some of said first, second, third, and fourth link advertisements are transmitted.

17. (Currently Amended) The means for providing mobility within a network according to claim 14, wherein said means for transferring an anchor point further comprises:

means for setting a first timer representing the maximum amount of time it should take for a low cost route to propagate throughout the wireless network; and

means for sending an ARP message informing entities that all packets with a the second destination address of ~~said anchor point~~ may be sent to the second entity, ~~an address of said another anchor point.~~

18. (Currently Amended) The means for providing mobility within a network according to claim 14, wherein said means for transferring an anchor point further comprises:

means for ~~deactivating~~ deallocating resources associated with said anchor point at the first entity;

means for initializing ~~said another~~ the access point at the second entity;

means for changing intervals at which at least some of the first, second, third, and fourth ~~said link state~~ advertisements are transmitted;

means for setting a first timer representing the maximum amount of time it should take for a low cost route to propagate throughout the wireless network; and

means for sending an ARP message informing all entities belonging to the same subnet as the second entity that all packets with a the second destination address of said anchor point may be sent to the second entity, ~~an address of said another anchor point.~~

19. (Currently Amended) The method of claim 1, ~~wherein the step of deleting comprises~~ further comprising deleting an instance of a dedicated controller in a modem pool controller (MPC).

20. (Currently Amended) The method of claim 1, ~~wherein the step of deleting comprises~~ further comprising deleting an instance of a dedicated transmitter in a modem pool transceiver (MPT).